ABSTRACT OF THE DISCLOSURE

In the present invention, for an unprocessed joint, a joint index and a joint rotation angle are obtained (S25, S27). For the unprocessed vertex corresponding to the obtained joint index, a vertex index and a weight w for the vertex are obtained. On the basis of the weight w and the rotation angle in the current frame, coordinate values of the vertex buffer are changed. A quarternion q1 according to the joint rotation angle in the current frame and a unit quarternion are sphere-linear interpolated with the weight w. From the resultant quarternion q, a conversion matrix R is determined for the joint. An overall conversion matrix M is obtained as M = RJTB, where a matrix T represents a relative coordinates from a parent joint, a matrix J represents a basic rotation angle, and B denotes a conversion matrix of the parent joint.